

FIGURE 1

	1		50
Taq	MRGMLPLFEP	KGRVLLVDGH	HLAYRTFHAL KGLTTSRGEP VQAVYGF
Tth	MEAMLPLFEP	KGRVLLVDGH	HLAYRTFFAL KGLTTSRGEP VQAVYGF
Tfi	MTPLFDLEEP	PKRVLLVDGH	HLAYRTFYAL S.LTTSRGEP VQMVYGF
Tsc	MRAMLPLFEP	KGRVLLVDGH	HLAYRTFFAL KGLTTSRGEP VQAVYGF
	51		100
Taq	LLKALKEDG.	DAVIVVFDK	APSFREAYG GYKAGRPTP EDFPRQLALI
Tth	LLKALKEDGY	KAVFVVDK	APSFREAYE AYKAGRPTP EDFPRQLALI
Tfi	LLKALKEDG.	QAVVVVDK	APSFREAYE AYKAGRPTP EDFPRQLALV
Tsc	LLKALREDG.	DVIVVVDK	APSFHQTYE AYKAGRPTP EDFPRQLALI
	101		150
Taq	KELVDLLGLA	RLEVPGEAD	DVLASLAKKA EKEGYEVRIL TADKDLYQLL
Tth	KELVDLLGFT	RLEVPGEAD	DVLATLAKKA EKEGYEVRIL TADRDLYQLV
Tfi	KRLVDLLGLV	RLEAPGEAD	DVLGTLAKKA EREGMEVRIL TGDRDFFQLL
Tsc	KEMVDLLGLE	RLEVPGEAD	DVLATLAKKA EKEGYEVRIL TADRDLYQLL
	151		200
Taq	SDRIHVLHPE	GYLITPAWLW	EKYGLRPDQW ADYRALTGDE SDNLPGVKGI
Tth	SDRVAVLHPE	GHLITPEWLW	EKYGLRPEQW VDFRALVGDP SDNLPGVKGI
Tfi	SEKSVLLLPD	GTLVTPKDVQ	EKYGVPPERW VDFRALTGDR SDNIPGVAGI
Tsc	SERISILHPE	GYLITPEWLW	EKYGLKPSQW VDYRALAGDP SDNIPGVKGI
	201		250
Taq	GEKTARKLLE	EWGSLEALLK	NLDRLKPA.I REKILAHMDD LKLSWDLAKV
Tth	GEKTALKLLK	EWGSLENLLK	NLDRVKPENV REKIKAHLED LRLSLELSRV
Tfi	GEKTALRLLA	EWGSVENLLK	NLDRVKPSL RRKIEAHLED LHLSLDLARI
Tsc	GEKTAACLIR	EWGSLENLLK	HLEQVKPASV REKILSHMED LKLSLELSRV

	251		300
Taq	RTDLPLEVDF A..KRREPDR ERLRAFLERL EFGSLLHEFG LLESPKALEE		
Tth	RTDLPLEVDL A..QGREPDR EGLRAFLERL EFGSLLHEFG LLEAPAPLEE		
Tfi	RTDLPLEVDF KALRRRTPDL EGLRAFLEEL EFGSLLHEFG LLGGEKPREE		
Tsc	RTDLPLQVDF A..RRREPDR EGLKAFLERL EFGSLLHEFG LLESPVAAEE		
	301		350
Taq	APWPPPEGAF VGFVLSRKEP MWADLLALAA ARGGRVHRAP EPYKALRDLK		
Tth	APWPPPEGAF VGFVLSRPEP MWAELKALAA CRDGRVHRAA DPLAGLKDLK		
Tfi	APWPPPEGAF VGFLLSRKEP MWAELLALAA ASEGRVHRAT SPVEALADLK		
Tsc	APWPPPEGAF VGYVLSRPEP MWAELNALAA AWEGRVYRAE DPLEALRGLG		
	351		400
Taq	EARGLLAKDL SVLALREGLG LPPGDDPMLL AYLLDPSNTT PEGVARRYGG		
Tth	EVRGLLAKDL AVLASREGLD LVPGDDPMLL AYLLDPSNTT PEGVARRYGG		
Tfi	EARGFLAKDL AVLALREGVA LDPTDDPLL AVLLDPANTH PEGVARRYGG		
Tsc	EVRGLLAKDL AVLALREGIA LAPGDDPMLL AYLLDPSNTA PEGVARRYGG		
	401		450
Taq	EWTEEAGERA ALSERLFANL WGRLEGEERL LWLYREVERP LSAVLAHMEA		
Tth	EWTEAAHRA LLSERLHRNL LKRLEGEERL LWLYHEVEKP LSRVLAHMEA		
Tfi	EFTEDAAERA LLSERLFQNL FPRLS..EKL LWLYQEVERP LSRVLAHMEA		
Tsc	EWTEEAGERA LLSERLYAAL LERLKGEERL LWLYEEVEKP LSRVLAHMEA		
	451		500
Taq	TGVRLDVAYL RALSLEVAEE IARLEAEVFR LAGHPFNLNS RDQLERVLFD		
Tth	TGVRLDVAYL QALSLELAEE IRRLEEEVFR LAGHPFNLNS RDQLERVLFD		
Tfi	RGVRLDVPLL EALSFELEKE MERLEGEVFR LAGHPFNLNS RDQLERVLFD		
Tsc	TGVRLDVAYL KALSLEVEAE LRRLEEEVHR LAGHPFNLNS RDQLERVLFD		

501 550

Taq ELGLPAIGKT EKTGKRSTSA AVLEALREAH PIVEKILQYR ELTKLKSTYI
Tth ELRLPALGKT QKTGKRSTSA AVLEALREAH PIVEKILQHR ELTKLKNTYV
Tfi ELGLTPVGRT EKTGKRSTAQ GALEALRGAAH PIVELILQYR ELSKLGSTYL
Tsc ELGLPAIGKT EKTGKRSTSA AVLEALREAH PIVDRILQYR ELSKLGKTYI

551 600

Taq DPLPDLIHPR TGR LHTRFNQ TATATGRLSS SDPNLQNIPV RTPLGQRIRR
Tth DPLPSLVHPR TGR LHTRFNQ TATATGRLSS SDPNLQNIPV RTPLGQRIRR
Tfi DPLPRLVHPR TGR LHTRFNQ TATATGRLSS SDPNLQNIPV RTPLGQRIRK
Tsc DPLPALVHPK TNRLHTRFNQ TATATGRLSS SDPNLQNIPV RTPLGQRIRR

601 650

Taq AFIAEEGWLL VALDYSQIEL RVL AHL SGDE NLIRVFQEGR DIHTETASWM
Tth AFVAEAGWAL VALDYSQIEL RVL AHL SGDE NLIRVFQEGK DIHTQTASWM
Tfi AFVAEEGWLL LAADYSQIEL RVL AHL SGDE NLKRVFREGK DIHTETAAWM
Tsc AFVAEEGWRL VVLDYSQIEL RVL AHL SGDE NLIRVFQEGQ DIHTQTASWM

651 700

Taq FGVPREAVDP LMRRAAKTIN FGVLYGMSAH RLSQELAIPY EEAQAFIER Y
Tth FGVPPEAVDP LMRRAAKTVN FGVLYGMSAH RLSQELAIPY EEAVAFIER Y
Tfi FGLDPALVDP KMRRAAKTVN FGVLYGMSAH RLSQELGIDY KEAEAFIER Y
Tsc FGVPPEAVDS LMRRAAKTIN FGVLYGMSAH RLSGELAIPY EEAVAFIER Y

701 750

Taq FQSFPKVRW IEKTLEEGRR RGYVETLFGR RRYVPDLEAR VKSVREAAER
Tth FQSFPKVRW IEKTLEEGRK RGYVETLFGR RRYVPDLNAR VKSVREAAER
Tfi FQSFPKVRW IERTLEEGRT RGYVETLFGR RRYVPDLASR VRSVREAAER
Tsc FQSYPKVRW IEKTLAEGRE RGYVETLFGR RRYVPDLASR VKSIREAAER

751

800

Taq MAFNMPVQGT AADLMKIAMV KLFPRLEEMG ARMLLQVHDE LVLEAPKERA
Tth MAFNMPVQGT AADLMKIAMV KLFPRLEEMG ARMLLQVHDE LLLEAPQARA
Tfi MAFNMPVQGT AADLMKIAMV KLFPRLKPLG AHLLQVHDE LVLEVPEDRA
Tsc MAFNMPVQGT AADLMKIAMV KLFPRLEEMG ARMLLQVHDE LVLEAPKEQA

801

837

Taq EAVARLAKEV MEGVYPLAVP LEVEVGIGED WLSAKE.
Tth EEVAALAKEA MEKAYPLAVP LEVEVGMGED WLSAKG.
Tfi EEAKALVKEV MENAYPLDVP LEVEVGVGRD WLEAKQD
Tsc EEVAQEAKRT MEEVWPLKVP LEVEVGIGED WLSAKA.

FIGURE 2

	1				50
X-1	MRAMLPLFEP	KGRVLLVDGH	HLAYRTFFAL	KGLTTSRGEP	VQAVYGFAKS
SM3	MRAMLPLFEP	KGRVLLVDGH	HLAYRTFFAL	KGLTTSRGEP	VQAVYGFAKS
Vi7a	MRAMLPLFEP	KGRVLLVDGH	HLAYRTFFAL	KGLTTSRGEP	VQAVYGFAKS
	51				100
X-1	LLKALREDGD	VVIVVFDAKA	PSFRHQTYEA	YKAGRAPTPE	DFPRQLALIK
SM3	LLKALREDGD	VVIVVFDAKA	PSFRHQTYEA	YKAGRAPTPE	DFPRQLALIK
Vi7a	LLKALREDGD	VVIVVFDAKA	PSFRHQTYEA	YKAGRAPTPE	DFPRQLALIK
	101				150
X-1	EMVDLLGLER	LEVPGFEADD	VLATLAKKAE	KEGYEVRILT	ADRDLYQLLS
SM3	EMVDLLGLER	LEVPGFEADD	VLATLAKKAE	KEGYEVRILT	ADRDLYQLLS
Vi7a	EMVDLLGLER	LEVPGFEADD	VLATLAKKAE	KEGYEVRILT	ADRDLYQLLS
	151				200
X-1	ERISILHPEG	YLITPEWLWE	KYGLKPSQWV	DYRALAGDPS	DNIPGVKGIG
SM3	DRISILHPEG	YLITPEWLWE	KYGLKPSQWV	DYRALAGDPS	DNIPGVKGIG
Vi7a	DRISILHPEG	YLITPEWLWE	KYGLKPSQWV	DYRALAGDPS	DNIPGVKGIG
	201				250
X-1	EKTAACLIRE	WGSLENLLKH	LEQVKPASVR	EKILSHMEDL	KLSLELSRVR
SM3	EKTAACLIRE	WGSLENLLKH	LEQVKPASVR	EKILSHMEDL	KLSLELSRVH
Vi7a	EKTAACLIRE	WGSLENLLKH	LEQVKPASVR	EKILSHMEDL	KLSLELSRVH
	251				300
X-1	TDLPLQVDFA	RRREPDRGL	KAFLERLEFG	SLLHEFGLLE	SPVAAEEAPW
SM3	TELPLQVDFA	RRREPDRGL	KAFLERLEFG	SLLHEFGLLE	SPVAAEEAPW
Vi7a	TELPLQVDFA	RRREPDRGL	KAFLERLEFG	SLLHEFGLLE	SPVAAEEAPW
	301				350
X-1	PPPEGAFVGY	VLSRPEPMWA	ELNALAAWE	GRVYRAEDPL	EALRGLGEVR
SM3	PPPEGAFVGY	VLSRPEPMWA	ELNALAAWE	GRVYRAEDPL	EALRGLGEVR
Vi7a	PPPEGAFVGY	VLSRPEPMWA	ELNALAAWE	GRVYRAEDPL	EALRGLGEVR
	351				400
X-1	GLLAKDLAVL	ALREGIALAP	GDDPMLLAYL	LDPSNTAPEG	VARRYGGEW
SM3	GLLAKDLAVL	ALREGIALAQ	GDDPMLLAYL	LDPSNTAPEG	VARRYGGEW
Vi7a	GLLAKDLAVL	ALREGIALAP	GDDPMLLAYL	LDPSNTAPEG	VARRYGGEW
	401				450
X-1	EEAGERALLS	ERLYAALLER	LKGEERLLWL	YEEVEKPLSR	VLAHMEATGV
SM3	EEAGERALLS	ERLYAALLER	LKGEERLLWL	YEEVEKPLSR	VLAHMEATGV
Vi7a	EEAGERALLS	ERLYAALLER	LKGEERLLWL	YEEVEKPLSR	VLAHMEATGV
	451				500
X-1	RLDVAYLKAL	SLEVEAELRR	LEEEVHRLAG	HPFNLNSRDQ	LERVLFDELG
SM3	WLDVAYLKAL	SLEVEAELRR	LEEEVHRLAG	HPFNLNSRDQ	LERVLFDELG
Vi7a	WLDVAYLKAL	SLEVEAELRR	LEEEVHRLAG	HPFNLNSRDQ	LERVLFDELG
	501				550
X-1	LPAIGKTEKT	GKRSTSAVL	EALREAHPIV	DRILQYRELS	KLKGTYIDPL
SM3	LPAIGKTEKT	GKRSTSAVL	EALREAHPIV	DRILQYRELS	KLKGTYIDPL
Vi7a	LPAIGKTEKT	GKRSTSAVL	EALREAHPIV	DRILQYRELS	KLKGTYIDPL
	551				600
X-1	PALVHPKTNR	LHTRFNQTAT	ATGRLSSSDP	NLQNIPVRTP	LGQRIRRAFV
SM3	PALVHPKTNR	LHTRFNQTAT	ATGRLSSSDP	NLQNIPVRTP	LGQRIRRAFV

Vi7a	PALVHPKTNR	LHTRFNQTAT	ATGRLLSSSDP	NLQNIPVRTP	LGQRIRRAFV
	601				650
X-1	AEEGWRLVVL	DYSQIELRVL	AHLSGDENLI	RVFQEGQDIH	TQTASWMFGV
SM3	AEEGWRLVVL	DYSQIELRVL	AHLSGDENLI	RVFQEGQDIH	TQTASWMFGV
Vi7a	AEEGWRLVVL	DYSQIELRVL	AHLSGDENLI	RVFQEGQDIH	TQTASWMFGV
	651				700
X-1	PPEAVDSLMLR	RAAKTINFGV	LYGMSAHRLS	GELAIPYEEA	VAFIERYFQS
SM3	PPEAVDSLMLR	RAAKTINFGV	LYGMSAHRLS	GELAIPYEEA	VAFIERYFQS
Vi7a	PPEAVDSLMLR	RAAKTINFGV	LYGMSAHRLS	GELAIPYEEA	VAFIERYFQS
	701				750
X-1	YPKVRAWIEK	TLAEGRERGY	VETLFGRRRY	VPDLASRVKS	IREAAERMAF
SM3	YPKVRAWIEK	TLAEGRERGY	VETLFGRRRY	VPDLASRVKS	IREAAERMAF
Vi7a	YPKVRAWIEK	TLAEGRERGY	VETLFGRRRY	VPDLASRVKS	IREAAERMAF
	751				800
X-1	NMPVQGTAAD	LMKLAMVKLF	PRLQELGARM	LLQVHDELVL	EAPKEQAEV
SM3	NMPVQGTAAD	LMKLAMVKLF	PRLQELGARM	LLQVHDELVL	EAPKEQAEV
Vi7a	NMPVQGTAAD	LMKLAMVKLF	PRLQELGARM	LLQVHDELVL	EAPKEQAEV
	801			833	
X-1	AQEAKRTMEE	VWPLKVPLEV	EVGIGEDWLS	AKA	
SM3	AQEAKRTMEE	VWPLKVPLEV	EVGIGEDWLS	AKA	
Vi7a	AQEAKRTMEE	VWPLKVPLEV	EVGIGEDWLS	AKA	